

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

09/849,644

MS150906.1/MSFTP164US

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all other versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended): A system for predicting a target file directory, comprising:
~~a component which analyzes probabilities and utilities associated with determining potential target directories for storing and accessing data;~~
a first component that infers and/or determines expected navigation costs for directory operations associated with potential target directories, wherein the expected navigation cost is based on a probabilistic and/or utility analysis; and
a second component that outputs a subset of the potential target directories, wherein the subset is determined by selecting target directories, based in part on the expected navigation cost, in order to minimize a cost of traversing directories.
2. (Cancelled)
3. (Currently amended): The system of claim 1, wherein the utilities are functions of navigation costs associated with traversing from a displayed node ~~from the~~ associated with a potential target directory under consideration to at least one of the other potential target directories.

09/849,644

MS150906.1/MSFTP164US

4. (Currently amended): The system of claim 1, wherein the second component further determines the subset of directories based on expected utilities, which of candidate nodes to display from a directory structure are computed as functions of probabilities of target information being at a node, and the navigation costs associated with traversing from the node to at least one of the potential target directories.
5. (Original): The system of claim 3, wherein the navigation costs are assigned by at least one of user selections and encoded within the system.
6. (Original): The system of claim 1, wherein the potential target directories are determined from at least one of a local computer system and a remote computer system.
7. (Original): The system of claim 1, wherein the probabilities are a function of recent and long-term file activity within a directory.
8. (Original): The system of claim 7, wherein the long term file activity is determined from a predetermined time horizon.
9. (Original): The system of claim 7, wherein the recent file activity is determined from frequency of access to a file.
10. (Original): The system of claim 9, further comprising a background monitor to determine file access frequency.
11. (Original): The system of claim 1, further comprising a list scan penalty for reducing probabilities associated with scanning lists within a directory.

09/849,644

MS150906.1/MSFTP164US

12. (Original): The system of claim 8, wherein the list scan penalty is determined as an exponential function that decreases as the number of elements on the list increases.
13. (Currently amended): A method for determining a potential target node for directory operations, comprising:
 assigning probabilities and utilities to a plurality of potential target nodes, the utilities represent costs associated with navigating from a recommended node to an actual target node;
 determining an expected utility from the probabilities and utilities associated with the plurality of target nodes; and
 displaying a candidate list of likely nodes to a user based upon the expected utility.
14. (Currently amended): The method of claim 13, ~~wherein further comprising multiplying~~ the assigned probabilities and utilities ~~are multiplied~~ together to form a product at each of the plurality of target nodes.
15. (Currently amended): The method of claim 14, ~~wherein further comprising summing~~ the products from each of the plurality of target nodes ~~are summed~~ together to determine the expected utility for one of the plurality of potential target nodes.
16. (Original): The method of claim 13, wherein the utilities are related to navigation costs associated with traversing from a displayed directory to at least one of the potential target directories.
17. (Original): The method of claim 16, wherein the navigation costs are assigned by at least one of user selections and encoded within the system.

09/849,644

MS150906.1/MSFTP164US

18. (Original): The method of claim 13, wherein the potential target nodes are determined from at least one of a local computer system and a remote computer system.
19. (Original): The method of claim 13, wherein the probabilities are a function of recent and long-term file activity within a directory.
20. (Original): The method of claim 19, wherein the long-term file activity is determined from a predetermined time horizon.
21. (Original): The method of claim 19, wherein the recent file activity is determined from frequency of access to a file.
22. (Original): The method of claim 21, further comprising, monitoring a user to determine file access frequency.
23. (Original): The method of claim 13, further comprising, determining a list scan penalty for reducing probabilities associated with scanning lists within a directory.
24. (Original): The method of claim 23, wherein the list scan penalty is determined as an exponential function that decreases as the number of elements on the list increases.
25. (Original): A computer-readable medium storing the computer-executable component of claim 1.

09/849,644

MS150906.1/MSFTP164US

26. (Currently amended): A system for determining a potential target node for directory operations, comprising:

means for assigning probabilities and utilities to a plurality of potential target nodes;

means for determining an expected utility from the probabilities and utilities associated with the plurality of target nodes; and

means for displaying a candidate list of likely nodes to a user based upon the expected utility, the candidate list comprises a subset of the potential target nodes.

27. (Currently amended): A signal adapted to be transmitted between at least two processes, comprising:

~~a predicting component for communicating information associated with predicting a target file directory; and~~

~~an analyzing component which analyzes probabilities and utilities associated with determining potential target directories via the signal for storing and accessing data.~~

a component that infers and/or determines suitable target directories for storing and/or accessing data based on a probabilistic and/or utility based analysis; and

an output component that outputs a subset of the suitable target directories wherein the subset is determined based in part on a minimized cost of directory traversal analysis.

28. (Cancelled)

29. (Currently amended): The signal of claim 27, wherein the suitable potential target directories are determined from at least one of a local computer system and a remote computer system.

09/849,644

MS150906.1/MSFTP164US

30. (New): The system of claim 1, the second component outputs the subset of directories as tree fragments.

31. (New): The system of claim 1, the subset comprises N potential target directories, N is an integer that is predefined.

32. (New): The system of claim 1, the subset comprises directories with expected navigation costs below a predetermined level.

33. (New): The method of claim 13, displaying the candidate list in descending order from highest expected utility.

34. (New): The method of claim 15, further comprising removing a potential target node with a maximum expected utility from consideration when evaluating expected utility for the other potential target nodes.